LCB

low cost beam scale

user manual

PALWAY

Precision Pallet Weighing

INTRODUCING THE LCB & BS+

The LCB and BS+ systems offer the user tremendous versatility. Designed for portability they offer the ability to accurately weigh most items up to 5 tonnes in weight, regardless of size. With a varying range of specifications available, including options for IP66 sealing, hazardous area use and weights and measures approval. Quality, reliability and performance come as standard.

These scales have really been designed with the end user in mind. The beams can be separated to the required length to suit all given pallet sizes, or can be reduced to weigh items of small size if required. These scales are extremely portable and offer a high accuracy to the user. Because they are so light and portable they can be stored in an upright position out of the way when not in use.

USING THE BEAM SCALE FOR THE FIRST TIME

Please ensure that the beams are properly unwrapped paying particular attention to any packing tape around the legs, make sure that it is removed fully prior to use, as it could result in inaccurate weighing. Locate the display in a safe place where it won't be knocked or damaged. If need be, use the key holes pre-cut into the stand to mount it to the wall. Plug the leads in to the beams and the opposite end to the leads in to the display unit. Then plug the supplied mains adaptor in to the socket on the display and then into a suitable mains outlet. Note that the red light illuminates above the on button, indicating that power is being supplied correctly to the display unit. Always remember to turn the display on without any weight on the scale, this ensures that the display turns on at the correct zero.

Once you are satisfied that all leads are plugged in and routed as far away from walkways, then you are ready to turn the scale on for the first time. Read the instructions on the display functions and buttons and familiarize yourself with them.

Maximum Load. The maximum load may not be exceeded. Remember that the Beam Scale is designed for evenly distributed pallet loads etc. If the forks are point loaded to one side, there will be a risk of bending and permanent damage to the scale.

INTRODUCING THE SIGMA DISPLAY

The Sigma scale display is a high quality small sized weighing indicator manufactured using the latest microprocessor technology. It also uses the latest delta-sigma type analogue to digital converter giving fast ultra-linear conversion. All the devices used are Cmos to give a very low current consumption, ideal for battery-powered applications. Calibration is software controlled for ease of installation with both gain adjustment and a dead load offset adjustable via software. This coupled with error checking by the software gives the user a high precision and highly versatile weighing display.

DISPLAY SPECIFICATIONS

Voltage	8 – 24 volts dc
Current consumption	15-ma approx.
Display type: LCD board 2	6 digit LCD 25.0mm high
Number of scales	1 or 2 Independent
Input sensitivity: Scale 1	4 – 10 MV/v input
Internal resolution: High	1 part in 450000 *
Internal resolution: Low	1 part in 65000
Display resolution	2,3,4,5,10000 divisions
Display increment	1,2,5
	0.0000, 00.000, 000.00, 0000.0
Display Scaling	or 00000
Set points	2 (only available in 1 scale mode)
Serial Port	1 configurable

OPERATING THE SIGMA DISPLAY

On/Tare/+Print

Pressing this button will turn the scale on, following which you will see the display give a version number followed by a system self-check. During this period you should see the display count from 1 through to 9 then start weighing.
Pressing this button during weighing mode will re-zero the display.

Kg/Lb/-Print

This key will do nothing when pressed by itself. However, if you press and hold down the key, press and hold down , release , release , you will convert kg to lb. When in pounds mode, the L.E.D. will light above this button. To return to kg mode repeat the sequence.

Pre-set Tare/Set-point/Function/Sub-Total Print

By pressing this button you will be presented with a pre-set Tare facility, where you can select what your Tare weight will be. Press , "tare01" will be displayed. Press , XXXXXX will be displayed with right hand digit flashing. Repeatedly press to increment flashing number from 0 – 9, press to move flashing digit from right to left. When desired tare weight is displayed press twice to revert to weighing.
Pressing this button, followed by the will take you to setpoint 1. Pressing again goes on to setpoint 2. This works in the same sequence now as the tare input facility and can be configured to the user's requirements.

Net/Gross/Shift

Pressing this key once will allow you to alternate between the pre-set tare weight and gross weight. When you display Net weight, the LED will illuminate above this key.

Standby/Total Print

By pressing this button once you will switch the display off and it will enter stand-by mode.

Printing Functions

When a printer is attached to the scales RS232 port the buttons take on further functions to allow for label or tally roll printing. These are as follows:-

B/G + →0← + Print (label roll mode: Single Print)

B/G + ⊙ - Print

B/G + →T← Sub-Total

B/G + ⏻ Full Total

LOOKING AFTER YOUR NEW SCALE

Cleaning the Sigma Display

When cleaning the Sigma display unit, be careful not to use harsh abrasives or cleansing agents that are solvent based or that are alkaline. Care should be taken around the display area. Using a clean cloth, moistened with water and a small amount of washing liquid is fine.

STANDARD SPECIFICATIONS

Length	1200mm	**Width**	120mm
Height	LCB - 60mm BS+ - 75mm	**Weight**	2 x 12.5kg
Capacity	2000Kg x 0.5Kg (others available up to 5000kg)		
Accuracy	+/- 0.1% F. S.		

OPTIONS PACKAGES – weighing system

LCBC 2000kg Capacity x 0.1kg increment, keyboard to allow Tare weight entry, Piece weight or Sample quantity for parts counting, 20 memory stores of Tare and/or Piece weight, nett/gross weight display and lbs/kgs conversion

BS+C Up to 5000kg Capacity, keyboard to allow Tare weight entry, Piece weight or Sample quantity for parts counting, 20 memory stores of Tare and/or Piece weight, nett/gross weight display and lbs/kgs conversion

LCBP Same specification as BS+ with Sigma5 display and added tally roll or label printer providing record of Gross weight, Nett weight, Date & Time, Barcode and User definable banner 2 lines of up to 12 characters each line.

BS+P Same specification as BS+ with Sigma5 display and added tally roll or label printer providing record of Gross weight, Nett weight, Date & Time, Barcode and User definable banner 2 lines of up to 12 characters each line.

LCBW&M Weights and Measures approved Beam scale, 1500kg x 1kg approval

BS+W&M Weights and Measures approved Beam scale, Up to 4000 x 1kg approval

LCBSS Stainless Steel version of standard LCB, loadcells sealed to IP67 (5 year warranty on loadcells), display to IP65

BS+SS Stainless Steel version of standard BS+, loadcells sealed to IP67 (5 year warranty on loadcells), display to IP65

LCBGALV Galvanized version of standard LCB, loadcells sealed to IP67 (5 year warranty on loadcells), display to IP65

TROUBLESHOOTING GUIDE

Error	Description	Solution
The display reads uuuuuu	Connection fault	Check to see if leads are connected correctly, or if continuity has been disrupted (e.g. cable broken)
	The scale is below acceptable level for zero range	Make sure nothing is obscuring free movement of the load-cell in the weighing platform
The display reads nnnnnn	Connection fault	Check to see if leads are connected correctly, or if continuity has been disrupted (e.g. cable broken)
	The scale is above acceptable level for full scale or overload	Check to make sure the scale is not overloaded or above capacity.
Display turns itself off	Battery fault	Check to make sure the battery is fully charged and is suitable for use
Display is unstable or does not read correctly	Lead fault	Check to see if leads are connected correctly, or if continuity has been disrupted (e.g. cable broken)
	Battery fault	Check to make sure the battery is fully charged and is suitable for use

Declaration of Conformity

Manufacturer	**Palway Ltd.**
Display Type	**Sigma5**

Corresponds to the following EC directives:

EMC Directive	**89/336/EEC**
Low Voltage Directive	**73/23/EEC**
Applicable Harmonised Standards	**EN 50 081-1** **EN 50 082-1** **EN 60 0950**

Palway Limited reserves the right to alter without notice the specification, design, price or conditions of supply of any product or service in the interests of product improvement.

Your local distributor:
Palway Ltd
6 Macadam Close
Drayton Fields Industrial Estate
Daventry
Northamptonshire
NN11 8RX
+44 (0) 1327 876387

www.palway.com sales@palway.com

PALWAY
Precision Pallet Weighing